REMARKS

In view of the above amendments and the following remarks, reconsideration of the outstanding office action is respectfully requested.

The rejection of claims 22-26 and 28-32 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent No. 5,346,922 to Beldock et al. ("Beldock") and U.S. Patent No. 4,929,644 to Guilbeaux is respectfully traversed.

Beldock relates to an insect repellent that includes terpineol, citronella, and one or both of rhodinol extra and geraniol as active ingredients. As acknowledged by the U.S. Patent and Trademark Office ("PTO") at page 2 of the outstanding office action, Beldock neither discloses nor suggests the use of colloid particles having an ion exchange capacity (e.g., clays) and having attached one or more ligands with a charge and a hydrophobic domain.

Guilbeaux relates to an organic composition containing a first organophilic clay which will increase the viscosity of the composition and a second organophilic clay which is different from the first and which will impart biocidal activity to the composition. Guilbeaux further discloses that the organic composition may be one component of a number of materials commonly applied to the skin surface, such as cosmetic formulations, antiperspirant agents, deodorant agents, pigments, antifungal agents, insect repellents, and the like.

It is the PTO's position that it would have been obvious to utilize a topical composition of Beldock modified with Guilbeaux to provide acceptable application with any insect repellent. The PTO further states that Guilbeaux teaches that one would be motivated to perform this modification in order to safen topical products. Applicants respectfully disagree.

In particular, claim 22 (and its dependent claims 23-32) is directed to "[a] method for delayed percutaneous delivery of one or more pharmaceutical compounds comprising: applying topically a complex comprising: colloid particles having an ion exchange capacity and having attached one or more ligands with a charge and a hydrophobic domain, and one or more pharmaceutical compounds non-covalently bound to either or both of the colloid particles and the one or more ligands" (emphasis added).

Neither Guilbeaux nor Beldock, alone or in combination, teaches or suggests one or more pharmaceutical compounds non-covalently bound to either or both of the colloid particles and the one or more ligands, as required by the claims of the present invention. In

particular, as acknowledged by the PTO at page 2 of the outstanding office action, Beldock neither discloses nor suggests the use of colloid particles having an ion exchange capacity (e.g., clays) and having attached one or more ligands with a charge and a hydrophobic domain.

In addition, Guilbeaux merely teaches a composition which includes, as one component, a biocidal organic clay, and, for example, an insect repellent. Nowhere does Guilbeaux teach or suggest that the other members of the composition (i.e., an insect repellent, cosmetic agent, antiperspirant agent, deodorant agent, pigment, or antifungal agent) are non-covalently bound to the biocidal organic clay. In fact, Guilbeaux teaches that the composition may be prepared by mixing the organophilic clay which thickens the formulation, the organophilic clay which imparts biocidal activity and the other ingredients in any order (col. 10, lines 8-11). In addition, Guilbeaux teaches that mixing may be achieved in any conventional mixer and is conducted for a period of time sufficient to ensure a substantially uniform mixture of the components (col. 10, lines 15-18). A mixture, as described in Guilbeaux, is a combination, such as a portion of matter consisting of two or more components in varying proportions that retain their own properties (see Merriam-Webster's Collegiate Dictionary (http://www.m-w.com)). Thus, the disclosure of a mixture in Guilbeaux does not teach or suggest that the clay and other ingredients must be non-covalently bound to each other, as required by claim 22 (and its dependent claims) of the present application.

Alternatively, Guilbeaux teaches that the biocidal organic clay is prepared in the form of an additive which can be added to the organic composition (col. 10, lines 19-38). As Guilbeaux merely teaches either a mixture including a biocidal organic clay and other ingredients (e.g., an insect repellent) or the use of a biocidal organic clay as an additive to a composition including other ingredients, there is no disclosure or suggestion that the biocidal organic clay is non-covalently bound to other ingredients in the composition.

In contrast with the disclosures of Beldock and Guilbeaux, because the pharmaceutical compounds are non-covalently bound to the colloid particles and/or the one or more ligands of the present invention, the ability of the pharmaceutical compounds to leach out is reduced. Thus, the pharmaceutical compounds retain their pharmaceutical properties, and the need for repeated coatings to a surface (e.g., the skin) is eliminated or reduced. In addition, because the pharmaceutical compounds are associated with colloid

particles having attached one or more ligands, which are inert, they are less likely to be absorbed by a surface (e.g., the skin) and, therefore, they are less toxic to that surface.

Accordingly, the rejection of claims 22-26 and 28-32 over Beldock and Guilbeaux is improper and should be withdrawn.

In view of the all of the foregoing, applicants submit that this case is in condition for allowance and such allowance is earnestly solicited.

Respectfully submitted,

Date: January 30, 2004

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Date 1/30/04 ~~Peggy Dimmyer~~ KAREN HOLYNSKI